

CLAIMS

What is claimed is:

1. A device for notifying an operator of the readiness of a vehicle for emissions
5 testing, comprising:
a housing containing a control logic for evaluating the status of each of a plurality
of the monitors of an on-board diagnostics (OBDII) system of the vehicle;
a connection port adapted to mate with the diagnostic link connector of the OBDII
system, placing the control logic in electrical communication with the OBDII system; and
10 an indicator for notifying the operator when the vehicle is determined to be ready
for emissions testing based on the status of each evaluated monitor of the OBDII system.
2. The device of claim 1, in which the indicator is a light that is illuminated when
the vehicle is determined to be ready for emissions testing.
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3. The device of claim 1, in which the indicator is an audio signal emitted by the
device when the vehicle is determined to be ready for emissions testing.
4. The device of claim 1, wherein the vehicle is considered ready for emissions
20 testing when less than a predetermined number of the monitors report a status of “not ready.”

5. The device of claim 4, and further comprising a selector switch allowing the operator to establish the value of the predetermined number of the monitors that may report a status of “not ready.”

5 6. The device of claim 1, and further comprising a selector switch allowing the operator to indicate whether the catalyst monitor must be reporting as “ready” in order for the vehicle to be considered ready for emissions testing.

7. The device of claim 5, and further comprising a selector switch allowing an
10 operator to indicate whether the catalyst monitor must be reporting as “ready” in order for the vehicle to be considered ready for emissions testing.

8. The device of claim 1, in which the indicator includes both a light that is illuminated when the vehicle is determined to be ready for emissions testing, along with an audio
15 signal emitted by the device when the vehicle is determined to be ready for emissions testing.

9. The device of claim 8, and further comprising a selector switch allowing an operator to indicate whether the light is illuminated, the audio signal is emitted, or both when the vehicle is determined to be ready for emissions testing.

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10. The device of claim 1, and further comprising a plurality of individual indicator lights, each indicator light corresponding to a particular evaluated monitor, and each indicator

light being illuminated when the corresponding monitor is reporting as “ready” or “unsupported.”

11. A method for determining when a vehicle is ready for emissions testing and
5 notifying an operator of the same, comprising the steps of:
continuously evaluating the monitors of an on-board diagnostics (OBDII) system
of the vehicle through a device connected to the diagnostic link connector of the OBDII system;
counting the number of monitors reporting as “not ready”; and
notifying the operator when the number of monitors reporting as “not ready” is
10 less than or equal to a predetermined threshold.

12. The method of claim 11, wherein the step of notifying the operator is achieved
through a visual indicator light on a surface of the device that is illuminated when the number of
monitors reporting as “not ready” is less than or equal to the predetermined threshold.

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13. The method of claim 11, wherein the step of notifying the operator is achieved
through an audio signal emitted by the device when the number of monitors reporting as “not
ready” is less than or equal to the predetermined threshold.

20 14. The method of claim 11, wherein the device connected to the diagnostic link
connector includes a selector switch which allows the operator to establish the predetermined
threshold.

15. The method of claim 11, wherein the device connected to the diagnostic link connector includes a plurality of individual indicator lights, each indicator light corresponding to a particular evaluated monitor, and each indicator light being illuminated when the corresponding monitor is reporting as “ready” or “unsupported.”

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16. A method for determining when a vehicle with an on-board diagnostics (OBDII) system is ready for electronic interrogation of the OBDII system as part of an emissions inspection, comprising the steps of:

connecting a notification device to the OBDII system, said notification device
10 having a control logic capable of evaluating the status of one or more monitors of the OBDII system;
evaluating the status of said one or monitors of the OBDII system; and
notifying an operator when the control logic of the notification device determines
that the vehicle is ready for the electronic interrogation of the OBDII system based upon its
15 evaluation of the monitors of the OBDII system.

17. The method of claim 16, wherein the step of notifying the operator is achieved through a visual indicator light on a surface of the notification device that is illuminated when the number of monitors reporting as “not ready” is less than or equal to a predetermined
20 threshold.

18. The method of claim 17, wherein the notification device includes a selector switch which allows the operator to establish the predetermined threshold.

19. The method of claim 16, wherein the step of notifying the operator is achieved through an audio signal emitted by the notification device when the number of monitors reporting as “not ready” is less than or equal to a predetermined threshold.

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20. The method of claim 19, wherein the notification device includes a selector switch which allows the operator to establish the predetermined threshold.

21. The method of claim 16, wherein the notification device includes a plurality of
10 individual indicator lights, each indicator light corresponding to a particular evaluated monitor, and each indicator light being illuminated when the corresponding monitor is reporting as “ready” or “unsupported.”